

UNIVERSITY OF MINN
RECEIVED
MAY
7
1938
LIBRARY

Vol. VIII

JUNE, 1936

No. 12

Agricultural Education

STATE OF NEW JERSEY DEPARTMENT OF PUBLIC INSTRUCTION



Classes in Agriculture for Young Farmers

This Certifies That George Bauer has satisfactorily
completed a unit of instruction in Agriculture given under the direction
of the undersigned teacher of Agriculture during the current school year, and is
therefore entitled to this testimonial.

Given at Trenton, New Jersey, this 9th day of April, 1935

Charles H. Elliott
Superintendent of Schools

Ralph Barker
Director of Agriculture

Harry A. Henry
Teacher of Agriculture

W. D. Dutton
Teacher of Agriculture

Recognition for Completion of Part-Time
and Evening Class Work. (See page 192)

"The way for a young man to rise is to improve
himself in every way he can, never suspecting
that anyone is hindering him."—Lincoln.

EDITORIAL COMMENT

A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by the Meredith Publishing Company at Des Moines, Iowa.

MANAGING EDITORS

Roy A. Olney, Morgantown, West Virginia.....Editor
 Carsie Hammonds, Lexington, Kentucky.....Associate Editor
 F. E. Moore, Des Moines, Iowa.....Consulting Engineer
 W. F. Stewart, Columbus, Ohio.....Business Manager

SPECIAL EDITORS

A. M. Field, St. Paul, Minnesota.....Methods
 A. P. Davidson, Manhattan, Kansas.....Book Reviews
 A. W. Nolan, Urbana, Illinois.....Professional
 Edm. C. Magill, Blacksburg, Virginia.....Research
 E. R. Alexander, College Station, Texas.....Research
 L. R. Humphreys, Logan, Utah.....Future Farmers of America
 G. A. Schmidt, Fort Collins, Colorado.....Supervised Practice
 Lester B. Polham, Topeka, Kansas.....Farm Mechanics
 J. B. McClelland, Columbus, Ohio.....Part-time Schools
 V. G. Martin, State College, Mississippi.....Evening Schools

EDITING-MANAGING BOARD

F. E. Armstrong, Hawaii; E. R. Hoskins, New York; M. D. Mobley, Georgia;
 Roy A. Olney, West Virginia; R. W. Gregory, Indiana; Carsie Hammonds,
 Kentucky; A. K. Getman, New York; William Kerr, Idaho; J. A. Linke, Wash-
 ington, D. C.; F. E. Moore, Iowa; E. E. Gallup, Michigan; W. F. Stewart, Ohio.

Subscription price, \$1 per year, payable at the office of the Meredith Publishing Company, Des Moines, Iowa. Foreign subscriptions, \$1.25. Single copies, 10 cents. In submitting subscriptions, designate by appropriate symbols new subscribers, renewals, and changes in address. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.

Entered as second-class matter, under Act of Congress, March 3, 1879, at the post office, Des Moines, Iowa.

YOU MUST CATCH THE FOX

IN THE olden days when a fox was an animal instead of a film corporation, hunting this wily animal was great sport. Of course, the object was to get the fox, but if the weather was bracing and the company inviting, nobody cared very much whether the fox got away or not. The hunter who kept on the trail thru a rough bit of country was a temporary hero, even tho the quarry ultimately popped safely into a hole.

Sometimes it seems that we are going about this business of improving American agriculture thru systematic instruction in the public secondary schools in somewhat the manner of the old-fashioned fox hunt.

We follow the high school boy thru the devious trackings of two, three, or four years of vocational agriculture, and then when he is at an age, and with an accumulation of experience to really make him worth "bagging," we rein in, look at our watches and trot home. Even tho the "fox" follows us halfway back, we do not take action.

Our "hunting ground" appears to be a maze of paths, such as judging contests, livestock fairs, recreational events, project record books and scholastic attainments. Each of these paths would lead eventually to the capture but we follow first one and then another, always doubling back and feeling that we have completely covered the ground. We do not follow them out to see where they go.

Then, there is the other hunter who trails the party somewhere along the course, all toggled out in the conventional jacket and cap. He "yoicks" and "tallyho's" with the rest. Suddenly we discover that he is riding like the wind, and the next thing we know, he has the quarry by the tail, proudly exhibiting his prowess as a hunter. It is useless to point out that you have already put your "brand" on the fox, unless that brand is a deep one.

In those old days, the hunt and not the fox was uppermost. As a modern version, and just to prove it, we have the whip-pet races with a tin rabbit instead of a flesh-and-blood fox.

Now, this sort of thing is fine for those who can afford it. We as vocational agriculture teachers cannot. It is not enough these days to have been a good hunter. We must follow thru every path, head the fox away from every hole, and never stop until we have bagged the quarry. Going over some of the jumps with a flourish gets applause—both fickle and fleeting. Only the "brush" really counts.

Or, in American words of few syllables, our job is to send the young or adult farmer back to the farm from our schools, as fully equipped as possible to improve the practices on that farm, to increase farm income and to add to the joys of rural living.

Or, as our forefathers might have said: "There is greater joy in one young man who becometh a successful farmer than in forty trophies in the agricultural bookcase."—J. A. P.

THE JOB AND THE MAN

THERE is no job with a greater challenge to young men than the job of the teacher of vocational agriculture. The challenge, however, comes only to those who have the vision to see the possibilities for service thru hard work, both day and night, in discharging the many responsibilities necessary to make his work really effective.

Unlike the job of the average high school teacher, the work of the teacher of agriculture extends to the limits of the community. Some of the things which the job requires are (a) getting acquainted with and winning the confidence of the farmers; (b) making surveys of the farms and farm practices in the community; (c) the building of a program of work to meet the needs as found in the surveys; (d) the preparation of teaching material; (e) the setting up of library and other facilities in the agricultural department; (f) the equipment of a farm shop to be used in training vocational pupils in making necessary repairs and doing construction work on the home farms; (g) the organization of long-time supervised farming programs with vocational pupils; (h) a follow-up of every pupil on the home farms to assist in their farming programs; (i) the organization of local fairs and exhibits; (j) assisting in the programs of local farm and other organizations; (k) conducting educational tours and trips, and (l) the organization of and acting as adviser for the local chapter of the Future Farmers of America.

The job further requires that systematic instruction be extended to as many farm people as possible in the community. This means that the teacher of agriculture shall not only recruit and teach agriculture to farm boys in the regular high school but, in addition, he should organize classes for out-of-school farm boys who are interested in returning to school for instruction in agriculture and other much needed subjects. Besides part-time classes, evening classes should be organized for adult farmers who are desirous of returning to school and discussing their many problems looking to the improvement of their farming programs.

These and other responsibilities present a real challenge to red-blooded young men who dare to undertake this job. Some are weak and often possessed with fear and cannot meet the challenge. Some make excuses and are satisfied to teach from 10 to 15 all-day pupils in the high school, while others with vision and courage do accept the challenge and are reaching from 100 to 150 farm people thru systematic instruction. One teacher who had the vision and courage built up his all-day classes from 6 to 42 pupils and then organized a part-time class of 18 out-of-school farm boys. Not yet satisfied, he organized two classes of 30 each for adult farmers, making a total of 120 farm people he was reaching thru systematic instruction.

To succeed at this job, the man who undertakes it must, first, be thoroly interested in the welfare of farm people; second, he must make a careful technical and professional preparation, including a study of personal fitness for the many responsibilities which he must assume; and third, he must not be afraid of hard work as the job requires superhuman efforts at times to reach a high degree of success.

Teachers of agriculture, this is the challenge which faces you who with vision and courage would go forth in the quest of adventure in the field of educational service to farm people. The holy grail of success is not found in distant lands but in your own communities. To be able to find it, one must have a vision of the possibilities for service and an inspiration to accomplish these possibilities. When the holy grail is found you will find that it consists of a life well lived, a job well done not only in training young men for farming but also in training them for rural leadership, co-operation, citizenship, patriotism, and creating in them a sincere love for country life.—J. A. L.

The Agricultural Education Binder will keep your copies of the magazine in good shape. Postpaid one dollar.



Professional



Agriculture Teachers' Contacts

HARRY E. BRADFORD, Chairman, Department of Vocational Education,
University of Nebraska

THE successful teacher of agriculture is in the spotlight most of the time. The nature of his job causes him to be associated with people of various ages, interests, outlooks, and backgrounds. With him, teaching becomes a very personal matter, not to be thought of simply in terms of textbooks or lectures. He meets his boys in the fields and talks to farmers in the feed lot. The summer months find him calling at farm homes where prospective high school students live. Within a very few months after his arrival everyone in the district knows the teacher of agriculture. He simply cannot and should not escape the spotlight if he is to be a teacher who makes the most of his job and senses its possibilities to the fullest extent.



H. E. Bradford

What a variety of people this teacher of agriculture meets in his daily and weekly routine! He must work harmoniously with his principal and superintendent, who often are not quite sure that agriculture is valuable as subject matter for an up-to-date high school. The county agriculture agent and the local veterinarian must be persuaded that the instructor of agriculture is friendly and means to be co-operative instead of antagonistic. The local harness repair man and the dealer in feeds have special interests of their own which might suffer or be helped by the ideas and practices taught "up at the high school." The editor of the local paper wants to know what is going on and he should be kept informed. In fact, the scribe will be more likely to be sympathetic and friendly if he has a personal acquaintance with the teacher.

Since all these contacts are necessary and inevitable, the man who teaches agriculture should make sure, so far as possible, that his words and actions produce favorable instead of dangerous personal reactions. Says the teacher, "How may I know?" The purpose of this article is to answer that question by means of an inventory of important personal characteristics.

Just by way of introduction, our teacher of agriculture must somehow develop the art of making friends with farmers and creating favorable impressions on business men in the community. He must have the spirit of youth in his contacts with boys and of maturity in his relations with fathers and mothers. One teacher remarked, "It can't be done!" But it is being done successfully by young fellows in their early twenties and it can be done more intelligently if

one becomes conscious of the common reactions to certain types of teacher behavior.

Suppose we begin with the county agent. A certain teacher of agriculture in a county seat town organized and taught an evening class of adult farmers for ten consecutive weeks without mentioning the matter to the county agent whose office was just a block away from the high school. What a chance he missed to begin a fine co-operative relationship between vocational agriculture and agricultural extension! A few years ago we used to discuss the dividing lines between vocational agriculture and the agricultural extension service. Now our thoughts turn to ways in which we may co-operate for the benefit of the community.

Careless speech habits are often hindrances to the success of teachers of agriculture. One brilliant young fellow habitually uses the double negative and his sentences are seldom free from "ain'ts" and other objectionable English forms. This teacher lost two positions thru the use of slovenly English when making a personal application. Superintendents do notice bad English habits which are likely to appear again in the speech of high school boys.

There are many other careless habits which ruin the chances of teachers for advancement. One instructor appeared at an F. F. A. banquet minus a coat, shirt mussed and soiled, and sleeves rolled above the elbows. A board member smiled and remarked that Mr. A always wore a dirty shirt. One might make a long list of little personal habits which need care and attention. Dirty fingernails and three-day beards have no place in the schoolroom or on the street. One woman, secretary of the board of education, requested a new teacher who could keep his shop clean. Our reputations in the community are made thru our personal contacts with men and women in other lines of work. They see our whole agricultural program thru their acquaintance with the local teacher.

On a sign board were the words, "If you want to win an argument, don't argue." Some folks cannot resist an argument. They feel better satisfied when they win a point even tho they leave a disgruntled opponent. A teacher in a small community found himself dangerously near dismissal with few friends and many opponents. His great weakness was an uncontrollable desire to argue and drive his point home. Otherwise, he was an efficient teacher, ranking above the average in skills and organization. Somewhere, somehow, he should have learned that a man in the public eye need not always have his way in discussions where there are two sides. Respect for the views of others is a cardinal

virtue likely to win friends for the tolerant individual.

Let us take a look at the relations between the teacher and his pupils. The writer spent a day visiting a department of vocational agriculture and was the guest speaker at an evening F. F. A. meeting. The details of the day seemed to take care of themselves. Boys knew what to do and where to go. The teacher was in the background, but the show went on. Everyone was busy at some job which seemed to be a part of a well-thought-out plan. The president of the F. F. A. introduced himself and told of plans for the evening. He later called the meeting to order on time, transacted routine business, and then introduced the speaker. At the close, his "thank you" words were well chosen and the boys applauded. The teacher was in the background while the boys learned to take responsibility.

Another teacher was not so fortunate in his organization details. He seemed to be the general at all times. Boys looked to him for directions when confronted with any new situation. He snapped his fingers and the students jumped. He was a busy man making plans and directing their execution. His was a fine department if the visitor saw only the smoothness of the machine.

The first teacher was consciously preparing boys for responsible life situations. He gave them opportunities for the development of initiative and they learned to take the next step even when it called for an unexpected decision. The second man loved to be in the limelight. He wanted to be known as the general who gave the orders. No student dared to take a new step without glancing at the teacher for directions or approval. These are two real teachers, both successful in many ways. Their contacts with students were widely different, both in method and results. When boys in their classes become men they will praise or blame their former teachers of agriculture for the habits and attitudes developed during their high school days.

Last, but not least, let us look at the teacher's contacts with his superintendent or principal. He may make or break himself by the ease or difficulty with which he fits himself into the school systems. Attitudes of willingness to assume responsibility and to co-operate are quickly sensed by the superintendent. We are known to the executive by the way we suggest plans of action and by our method of carrying out the details.

Here again contacts count. When the superintendent visits a session of the evening school, he should meet every farmer present. He is part of the game and the teacher of agriculture should take pains to make him one of the group. Again this superintendent should always be consulted about every new

venture of the department of agriculture. It is embarrassing to a superintendent to be told about new school undertakings after they are well under way. Reports of teacher activities for the month are often very worth while because they make the superintendent aware of the details of a teacher's program.

These are only a few of the contacts of the teacher of vocational agriculture. Perhaps they are numerous enough to cause the teacher to stop, look, and listen lest his speech, his habits, and his behavior cause him grief in varying degrees. He is in the spotlight and his contacts mean much to the success of his program.

Vocational Agriculture—a Cultural Course

RUSSELL E. MacCLEERY, Vocational Agriculture Instructor, Essex Junction, Vermont

AT THE present time as in the past, many social science professors on faculties of colleges and universities having divisions or colleges of agriculture are prone to look askance at the curricula of the latter. Such courses as are included in the agricultural curricula, the professors argue, appear to be lacking in the opportunity to develop the still uneducated person into the really cultured man. Here in Vermont it is surprising to find what an erroneous conception the average layman has of vocational agricultural education and the unhealthy attitude which many high school pupils have towards choosing agriculture as a vocation. More astonishing is the fact that such a condition exists in a purely agricultural state whose primary source of income is derived from the sale of milk products. One of Vermont's major problems at the present time is to show her youth the opportunities her small towns are offering those energetic young men and women who wish to seek a worth-while career. Many of her youth born and reared in the Switzerland of America can see nothing more venturesome and valuable in settling down and farming than performing daily the irksome task of swinging a manure fork. Situations parallel to ours in Vermont may no doubt be found all over the United States. Whose job is it to remedy these conditions? I believe that we as instructors of agriculture should be the first to step forward to do something. Let us lead some of these disillusioned young men into happy and successful farm careers by first getting them to elect our course as a result of our having shown them that our course is one of the most truly cultural offered in high school. Webster defines culture as: "The act of improving or developing by education, discipline, etc. The enlightenment and discipline acquired by mental and moral training." Vocational agricultural education more than complies with the requirements for a cultural course as set up by this definition. It is cultural both to the mind and body. What other single course can give the high school student such a well-rounded scientific education, teach him proper use of leisure time, develop his manual dexterity, promote his understanding of good citizenship, and at the same time prepare him for a vocation?

Well-taught vocational agriculture gives the student a general scientific

education. No other single course in high school can bring into action in such a practical way so many of the physical, biological, and social sciences. The solution of farm problems in the classroom requires the student to use: physics in ventilation problems; chemistry in insecticide and fertilizer problems; mathematics in farm accounting; zoology in selecting farm animals for breeding; botany in diagnosing plant diseases; physiology in feeding; pathology in treating animal diseases; agricultural economics in farm management problems; English in writing business letters; and many more. In fact, their solution applies practically all sciences used in solving problems in any business. Practical applications of science and other subject matter constantly used in the agricultural classes should cause even the non-bookish boy to study more diligently in all his other courses.

Agricultural education should teach the student how to make proper use of his leisure time. An appreciation of art may be developed as in the case of training the eye for symmetry and beauty of form in farm animals. A love of knowledge may result from studying the interesting and intricate functionings of the biological world. A love of the out-of-doors may result from forestry and wild life studies. In short, the course gives the student a general knowledge of all living things, unravels for him in part the mysteries of the earth itself, acquaints him with the sociological problems of man and helps him appreciate the artistic and aesthetic side of life.

A four-year course in agriculture should enable the student to use tools skillfully. No other courses in most rural high schools in the country afford the student such opportunities to obtain skill and neatness in planning on paper beforehand the object he hopes to build. No other courses in these schools teach him the use of tools so that he will at least be handy around the home and farm.

Vocational agriculture also helps mold the student into a better citizen by teaching him how to put into practice the "Golden Rule." In his project work he learns thru actual experience, if necessary, that only honest business men survive. Qualities such as leadership and co-operation gained from F. F. A. activities are of life-long value.

Lastly, vocational agriculture should prepare a boy for a successful farm career and an appreciation of country life. The course should embrace practice in and study of the culture, harvesting and marketing of crops and the feeding, breeding, disease control, and general management of farm animals. It should develop also within the student the ability to make important decisions required to successfully manage and operate a modern farm. Farm management problems taken up in class develop ability to think thru solutions involving applications of principles of economics. Above all, after studying vocational agriculture, a boy should have a greater appreciation of rural life. Many young people in small villages are prone to become permanently dissatisfied with their dwelling places unless they have had their eyes opened to the advantages of country life. Many times such a state of mind is the result of their yearning to be a part of the "great white way" in a large city with complete oblivion to the won-

drous manifestations of Nature about them.

Vocational agriculture when properly taught is a cultural course. If more rural young men who are planning to go into fields other than agriculture could see the course from its cultural standpoint, more would be likely to elect it and a larger percentage would stay in farming. When such young men elect our courses, our field will be greatly enlarged. In the meantime, let us all take heed of the advice given in an article written by Mr. R. E. Noble, State Supervisor of High Schools in Vermont:

"High school and college courses in agriculture, high school courses particularly, should be more than vocational courses and should afford rich opportunities to develop desirable attitudes toward the civic, economic, and sociological problems in rural life. Here is a challenge to all of us."

Producing Baby Beef

JOE TOWERY, Agriculture Teacher, Owensboro, Kentucky

OUR beef calf club had its beginning in November, 1927, when a local packer created interest among our boys by paying \$1.20 per pound for the grand champion steer of the state Fat Cattle Show in Louisville. This was the first year for vocational agriculture in the Daviess County High School, and the boys were looking for something with which to make a show in the community and which could be used as a basis for their future farm practice programs. As a club we have been active ever since, beginning with only 18 calves and later feeding as many as 106 calves for the state show and sale.

The first few years we selected our calves from herds close to home, but later, as we desired better calves and more of them, we found that 100 select calves could not be secured at a reasonable price except in the western cattle country. For two years we journeyed to Marfa, Texas, to make our own selection of about 100 steer calves each time. Now we send an order for the calves we need and get better ones each year, as the men have learned the type and quality we require. That their quality is good is shown by the fact that we have won second place at the state show for four years straight, losing only to milk-fed Angus.

The calves we buy are all steers, all Herefords, all of the same size and age, all dehorned and castrated, making it possible for each club member to begin with equal opportunities.

Since these calves are small and weak from the 1,400-mile trip, the boys are encouraged to break and train their calves early. Sometimes the calves must be dipped or dusted for lice. A warm, well-bedded stall is essential for winter, and a cool, clean one for summer. Water, feed, and salt are kept before the calves all the time. Self-feeders are kept filled with a well-balanced ration. The manure is removed often, to avoid sore feet and to keep the stall clean and sanitary. The calves are given plenty of feed during the day and are turned on pasture at nights. Most of the boys hang empty feed bags across the stall so the calves can brush the flies off. Sometimes a fly repellent must be resorted to when the flies are bad. Each boy deposits in a trust fund \$2 per calf, and this is used to cover

any loss of calves by the boys. We have never failed to return most of this when the calves were sold. An interested feeder will see that his calves are comfortable at all times. No boy can skimp on anything and make a success of calf feeding.

Fully 80 percent of the feed consumed by these calves is produced on the boy's home farm. A prospective feeder must have the feed before he is admitted to the club. Every boy must feed at least two calves and not over five. This insures against failure. The calves are started on a well-balanced ration of corn and cob meal 62 percent, a good legume hay 20 percent, molasses 10 percent, cottonseed meal 5 percent, and a mineral mixture of 1 percent each of limestone, salt, and bone meal. Changes are made to fit the calf.

To make a well-balanced ration easier, a local sweet feed mill grinds and mixes the feed free of charge to the boys. The mill does this for the advertising value, and the club has no objection. The supplementary feeds are bought from the mill.

Often it is necessary to treat the calves for lice more than once during the feeding period. In cold weather a light dusting of an insect powder suffices. Later in the spring and summer, several good washings with tar soap and rinsing with a good stock dip puts life into the hair. If stub horns appear, they are easily removed. Sometimes the hoofs must be trimmed. The head is neatly trimmed, the ears cleaned out, and the tail roached. These things, along with a good calf, well cared for, properly fed, and well trained, do much to make a winner.

One of the biggest things in a calf club is the showmanship factor. Everybody admires a good showman. We have taken an active part in the last seven state shows. Each year as November approaches, the showmanship fever begins to run high. We hold a local show before loading for the state show and sale. Often \$200 in cash and 16 ribbons are offered to the 30 boy contestants. The money is secured from local businessmen who are interested in farm youth. Often 1,500 people see the local show. About 6,000 cattle were fed in this section this year, partly due to the interest created by the club. The interest has also spread to other near-by schools.

Strange as it may seem, the percentage of profit per calf has been about the same thruout the depression. The profit per calf does not seem to be a true index to the value of the calf feeding enterprise. Possibly the educational value along with the lessons in showmanship are the prime motives.

Briefly, here are some of the benefits which can be derived from a calf club:

1. It presents one of the best teaching situations. Kathleen Norris, on visiting a calf show recently, said, "For, while the boy thinks he is raising a steer, the steer is really raising the boy."
2. It makes for a well-balanced farm practice program. To produce a steer profitably, the corn, legume hay, and good pasture must be grown on the home farm.
3. The boy earns while he is still in school. A well-balanced program makes it possible for the boy to complete his education and at the same time grow into a business for himself.
4. When several boys have things in common, they learn from each other.

(Continued on page 191)

Kary C. Davis

LAST December, Dr. K. C. Davis of Tennessee, sat with a breakfast group of "Ten Year Teacher Trainers in Vocational Agriculture," at the American Vocational Association, held in Chicago. As usual, Dr. Davis was the delightful companion of the younger men gathered about him. The chairman suggested that every man present, give his name, address, and the number of years he had been in teacher training work; it developed that Dr. Davis was the oldest man in point of service, present, having been engaged in training teachers of agriculture since 1909.

The long years of professional service of Dr. Davis and his prolific writings have stamped his splendid personality upon thousands of his students and influenced the direction and course of the teaching of agriculture thruout the nation, during the last quarter of a century.

We shall greatly miss Dr. Davis in our councils, but his memory will be a benediction in all our work.—Dr. A. W. Nolan.

The Intangible Benefits Are Many

H. W. DEEMS, Teacher of Agriculture,
Pawnee City, Nebraska

A FEW years ago a farm boy entered the freshman agriculture class. He was a poor student. It seemed that nothing would interest him. In a small poultry contest, he had high score. That poultry contest was the spark that started the lad. He became interested in judging. In later years, he ranked well up among the leading livestock and poultry judges of the state. He finished high school. Today in his home community, he is considered an authority on many livestock problems. It is true that vocational agriculture gets credit for making a good farmer. The intangible benefits are, however, much greater. His success as a judge gave the boy confidence. Judging opened up a new frontier—a frontier in which he was eager to explore. He was able to enjoy with other young men that high satisfaction of life, success in some field. Had not some spark ignited the fuel within that boy, it would soon have been covered up with disappointment and discouragement. To society and the future of our country, there is a great difference between a farm leader and a farm laborer.

It was county fair time. A group of seven Jersey calves were lined up before the judge. Most of the boys were working hard for ribbons. The sweat was running down the face of a tall slender boy whose calf was in third place. The judge motioned to the boy to lead out his calf. The calf had been trained for just that thing. It moved out and looked its best. The calf was moved into first place. The crowd cheered. As the clerk handed this tall lad a ribbon, a tear ran down his cheek. The boy's mother came up and patted him on the back. His father stood talking to a group of men. He said, "Yes, that is MY boy in first place."

Vocational agriculture got credit for producing a good showman and a good calf. Let us check the benefits that just the boy, the parents, and the instructor know about. One can never tell that boy there is not a thrill in agriculture.

The thrill he got that day was greater than any he had ever gotten in football. The boy knows that time spent working with good livestock pays dividends. He cut coupons in both satisfaction and dollars. As his classmates congratulated him, he realized that his busy hours had been more profitable than their idle ones.

It was at the court house, some one hundred farmers were present. They were discussing ways of organizing the farmers of the county. They had talked for two hours and accomplished little. A young man near the front of the room stood up and addressed the group. He presented his plan. They liked it. The meeting was adjourned fifteen minutes later, well organized and happy. Vocational agriculture got credit for turning out a good farmer, in that young man. The intangible benefits that the boy received from the F. F. A. will show up for years and years.

Now for some intangible benefits that very few see. Many of the objectives of agriculture are human abilities. These human abilities must be developed for the future as well as for the present. Judging not only develops sound judgment in selecting, but it develops ability to make wise decisions. Decisions must be made all thru life. Analyzing a job develops thinking. A thinking that is farm type. Farming is not a static vocation. What teachers teach today may be wrong tomorrow. Yet this thinking ability developed by job analysis will still function. Working at home on a project builds habits of industry much faster than sitting on a street corner.

Investments in good livestock and crops are a safer foundation for thrift than investing in a 1927 model car.

Visiting good farms, and looking over experiment stations and agricultural colleges will raise the ideals of farm boys.

Other intangible benefits could be listed. These few should serve the purpose. No doubt you have all heard about the Ag man who spent so much time measuring results that he lost his job because of his poor program.

Organization of Agriculture Instructors

B. R. DUGDALE, Teacher,
Bruce, Wisconsin

RUSK COUNTY, Wisconsin, has had a permanent organization of vocational agricultural instructors since 1931. This association is composed of three instructors, with the county agent and editor of the farm page of the *Lady-smith News* as associate members. Meetings are held once a month to discuss problems of current importance.

With this organization we have been able to set up county-wide objectives and carry on a county program that has shown results. Some of these projects have been the annual dairy day picnic held in June each year; a series of meetings of rural school teachers to help them in the teaching of agriculture in the rural schools of the county; a tour of farmers to the experiment stations; the establishment of a county Future Farmer camp, and the planning of the program of the camp each year; formulating courses of study; supervising the boys and girls department at the county fair; holding county Future Farmer and

(Continued on page 192)



Methods



Forestry—Goals and Results

H. J. SHOUP, Teacher of Agriculture,
Little Valley, New York

THE proper utilization of land is one of the essential things to teach the future farmer. Many acres lie idle, too steep, unproductive, taxable, but only with one value and that for the growth of timber.

Little Valley Future Farmers have for the past seven years been making every effort possible to use properly the steep hillsides of Cattaraugus County, New York, and turn the waste farm lands into productive ones. This has been accomplished in several ways. In 1929, a retired farmer gave the association five acres on the side of Bucktooth Run to reforest. With determination and desire to learn of forestry, the class cleaned off bushes and an old shack and shed that were a menace to the neighborhood and then planted 11,000 evergreen trees.

The object was to learn how the different varieties grew in this section, as to rate of growth, survival, and adaptability, so 3,000 White Spruce, 3,000 Norway Spruce, planted three by three feet to develop into Christmas trees; 1,000 each of Red Pine, Scotch Pine, White Pine, Japanese Larch, and European Larch were planted six by six feet. Due to the dry weather and inexperience, about 1,000 trees have been re-set.

The same year nine boys secured 9,000 trees free from the conservation department and planted the trees on the home farm or waste land. This annual planting has been continued by different boys each year and 21,000 were planted in 1935.

In 1930 the school board realizing the educational value of having each class of Future Farmers learn to appreciate trees, how to plant them and the proper kind to plant by doing the work, and seeing possible income from these trees, purchased 40 acres at four dollars an acre on a highway where it would be an advertisement of the boys' work. Each year 3,000 to 5,000 trees have been set. More than this number plants the land too rapidly and becomes labor rather than purely educational.

One thousand Locust and 3,000 Balsam were planted so as to add variety. Red Pine and Spruce have given the best results. The projects were doing so well the village became interested and last winter decided to have the water shed surrounding the reservoir planted. A written agreement was made between the village board and the Future Farmers to plant 20 acres. The boys are to set 5,000 Red Pine and Norway Spruce trees each year. The village board will allow the spruce to be sold from the water shed by the Future Farmers. The money obtained will establish a scholarship fund for worthy Little Valley Future Farmers. It is expected that over \$3,000 will be earned in this way during the next 10 to 12 years, this being a long time project.

Twenty-five Little Valley boys planted 5,000 evergreen trees in two and one-

half hours with the long line, tied with knots every six feet and a six-foot pole, a boy on each end, a whistle and the teacher behind to check the planting.



Future Foresters

The boys have planted trees for cash for some village people and retired farmers.

The Buffalo Evening News offers medals and a trip to the outstanding first year and second year forestry pupils. Little Valley has received the gold and silver medals for several years.

The sectional winner of first year work and second year foresters makes a three-day trip into the Adirondacks.

During the last seven years over 125,000 trees have been set in one of the following ways.

1. Planting Future Farmer home farm land.
2. Planting Future Farmer Association land.
3. Planting village water sites as a co-operative and community project.
4. Encouraging 4-H Club members and farmers to plant trees.

Our Motto: "Make Little Valley Hills Green With Evergreen"

A State Regional Program of Work

ARTHUR A. ZIEGLER, Teacher of Agriculture,
Bisbee, North Dakota

THE first meeting of the north central district was held at Rolette in September and the following program of work was outlined by the teachers. The place of meeting is rotated among the eight schools in the region.

Month	Program
October	{ General business meeting Election of officers Yearly program
October	{ Special meeting G. C. Cook (F. F. A. Marketing Day)
November	{ Demonstration of rope work General discussion F.F.A. organization Superintendents present
December	{ Caponizing and post mortem F.F.A. activities

January	{ Diseases and parasites Evening Schools
February	{ Grain grading and weeds Use of illustrative materials F.F.A. initiations and point systems
March	{ Castrating demonstrations
April	{ Contests— 1. Livestock 2. Grain, Poultry, Potatoes Grain judging contest Livestock judging contest
May	{ May Festival
June	{ F.F.A. tour and camping trip

Teaching Forestry

J. D. O'QUINN, Agriculture Teacher,
Ridgeland, South Carolina

THE object of teaching forestry to high school students is to instruct them, thru theory in the class room and practice in the field; in the collection of forest tree seeds, thinning, and improvement of cuttings; fire break construction and general fire control; raising of forest tree seedlings, planting of seedlings on idle or incompletely stocked lands; estimation of timber quantities; co-operative forest protection; marketing forest products; and the better methods of handling woodlands on the farm.

Thru the co-operation of the South Carolina Forestry Commission, the board of trustees of Ridgeland Centralized Schools of Jasper County, the local agricultural teacher, and Mr. K. B. Schley, land owner, an agreement was made and signed by all parties to the effect that 10 acres of forest land was given for experimental and demonstrational purposes to the Ridgeland Agricultural Class for a period of 10 years.

We have on this ten-acre plot, one-fourth acre thinned and one-fourth acre unthinned, one-twentieth acre burned and one-twentieth acre unburned, as permanent plots with all the trees on these plots tagged with metal plates and numbered. Measurements of the trees on the permanent plots are made at the same time each year and recorded in a forestry notebook. Each year one-fourth acre of improvement cutting is done by which the students estimate with graduated tables the amount of cord wood standing. After this the wood is cut, stacked, and measured.

We planted 1,000 one-year-old long-leaf seedlings 10 feet by 10 feet apart. A plowed line 90 feet wide extends around three sides of the entire project, and the other side has two 15-foot plowed strips with an intervening 75-foot line that is burned each year. On one-half of the 90-foot strip bird feed is grown every other year. This gives us a 45-foot plowed strip for fire protection all the time.

At the beginning of each school year the district forester and I make out a monthly calendar of work to be done on school projects. We try to spend two 90-minute periods each Friday, either in the class room or in the field, doing some kind of forestry work.

The Ridgeland F. F. A. Chapter has 56 members enrolled with 100 percent doing some phase of home forestry project work, such as thinning, seed bed, fire control, improvement cutting, and planting seedlings. The chapter received a voucher for \$25.00 from the South Carolina Forestry Commission as a prize given to the winning school for the lower half of the state. Willard Riley, a member of the Ridgeland F. F. A. Chapter, also won a \$50.00 educational trip for the most outstanding piece of home forestry project work. Willard used a two and one-half acre thinning project.

Do We Teach Boys to Think?

M. A. SHARP, Department of Agricultural Engineering, Iowa State College, Ames

IF FARM mechanics is to be educational, it must contribute to the boy's mental development as well as to his development of operative skill. If we would develop a boy's ability to think, we must provide situations that require him to do some thinking. If we give him a detailed drawing of an object he is to make, with all directions for each procedure, what reason has he for doing any thinking?

It is admitted that in most cases this method is easiest for the boy and easiest for the teacher. Also, the maximum amount of work will be turned out by the group. But what have we done for the boy? Probably we have taught him to depend upon someone else to do his thinking for him and to furnish him with plans and directions. Also, he has learned to do as he is told. In other words, we have developed a leaner rather than a leader. After the boy leaves the school building and starts out to make his way in the world he will have to meet and solve most of his problems himself. The teacher will not be there to tell him what to do. Neither will he be able to find a set of plans and directions that will fit every situation. If he has never learned how to think for himself he will seek advice from those most willing to give it, such advice often being unreliable. The farm mechanics instructor has an excellent opportunity to teach the boy correct thinking methods and habits.

The teacher has three very important factors in his favor. First, the subject matter is, or should be, of a type which lends itself to good teaching methods. Second, the boy is interested in the work, and can readily comprehend the factors involved in the problems presented. Third, the classes are usually small enough so the instructor can give individual attention. How shall we go about the problem of teaching the boys to think?

The first essential is that the teacher must understand the five steps involved in the thinking process by which we solve problems. These are explained quite clearly by John Dewey in his

book, "How We Think," chapters five and six. The next step is outlining and planning in detail the method to be used in teaching the subject matter in the course. This does not mean that a detailed plan of every project must be worked out by the instructor. It does mean that he must know the thinking process, the subject matter, and the individual boy well enough to help him make his own plans, as he will have to do after leaving school. Those teachers who have forgotten the steps in the thinking process should read the reference suggested.

Objectives of Schools in Pittsylvania County, Virginia, for 1935-36

W. L. THWEATT, Teacher of Agriculture, Wenona, Virginia

THERE are six of us who are teaching agriculture in Pittsylvania County, a tobacco-growing county in Virginia where one of the soil erosion demonstration areas is located. We meet together regularly, weekly during much of the year to check on our programs and to settle our problems. In the past we have had individual community programs but this year we have a county-wide program, each with a specified share to accomplish for each item of the county program.

I. Long-term, Five-year Agricultural Objectives

A. Farm Adjustment Program:

1. Aid 70 farmers not reached by the Soil Erosion Service in establishing proper systems of soil conservation.
2. Co-operate with the United States Department of Agriculture.
 - a. Present to growers, business men, and others concerned the nature, purpose, and changes of program.
 - b. Encourage the U. S. standard grades in marketing tobacco.
3. Co-operate with the Farm Credit Administration in the following ways:
 - a. Present to farmers, business men, and others concerned the nature, purpose, and changes of the program.
 - b. Teach specific facts as to Production Credit, Commissioners Loans, Federal Land Bank Loans, Commercial Loans, and Co-operative Loans to individuals who need them.
4. Co-operate with the rural rehabilitation committee in presenting information.

B. Production Improvement:

1. Get ten farmers in the county to grow certified seed corn to supply county needs.
 - a. Get 50 farmers to field select seed corn for home use.
2. Sponsor and advocate a "live at home" program on 175 farms.
 - a. Feed for livestock.
 - b. Food for family.
 - c. Foster an effective pest control campaign.
3. Livestock improvement by:
 - a. Placing 14 pure bred sires.
 - b. Placing seven pure bred heifers.
 - c. Placing 14 pure bred male hogs.
 - d. Establishing 35 flocks of standard bred poultry.
4. Establish 50 capon enterprises.
5. Establish a county co-operative buying and selling organization.
6. Inform farmers as to the proper varieties, fertilization, and method of harvesting tobacco according to the soil.

II. Annual Objectives:

A. Agricultural Program:

1. Farm Adjustment Program:
 - a. Aid 14 farmers not reached by the Soil Erosion Service in establishing proper systems of soil conservation.
 - (1) Terracing.
 - (2) Crop rotation.
 - (3) Pasture Improvement.
 - (4) Strip rotation.
 - b. Co-operate with United States Department of Agriculture. (Same as above.)
 - c. Co-operate with the Farm Credit Administration. (Same as above.)
 - d. Co-operate with the rural rehabilitation. (Same as above.)
2. Production Improvement:
 - a. Get two farmers in the county to grow certified seed corn to supply county needs.

- (1) Get ten farmers to field select seed corn for home use.
- b. Sponsor and advocate a "live at home" program on 35 farms.
 - (1) Feed for livestock.
 - (2) Food for family.
 - (3) Foster an effective pest control campaign.
- c. Livestock improvement by:
 - (1) Placing three pure bred sires.
 - (2) Placing two pure bred heifers.
 - (3) Placing three pure bred male hogs.
 - (4) Establishing seven flocks of standard bred poultry.
- d. Establish ten capon enterprises.
- e. Establish a county co-operative buying and selling organization.
- f. Inform farmers as to proper varieties, fertilization, and method of harvesting tobacco according to the soil.

B. Departmental Objectives:

1. Meet all state objectives.
2. Reach 455 individuals thru organized instruction.
 - a. All-day classes.
 - b. Evening classes.
 - c. Part-time classes.
3. Hold three meetings of the advisory committee for each school to:
 - a. Set up program of work.
 - b. Report progress of work.
- c. Visit enterprises.
4. Put on seven educational exhibits at the Danville Fair.
5. Send all state and county reports in on time.
6. Teach record keeping in each enterprise conducted.
7. Organize and conduct seven evening schools for adult farmers on a permanent basis.
8. Every agricultural instructor join the State Teachers' Association and the American Vocational Association.
9. Every department have a well equipped shop and a well organized shop program.
10. Have each boy enrolled in vocational agriculture perform at least eight supplementary farm jobs and farm shop jobs.
11. Fit the classroom instruction around the boys' supervised practice program whenever practical.
12. Have one of the agricultural instructors in the county submit in person, at a meeting of the school board, a summary of the year's work in agricultural instruction.
13. Assist eight farmers in pruning grape vines. (Spring Garden and Dan River Departments.)
14. Assist ten farmers in the propagation of grapes by the cutting method. (Spring Garden Departments.)
15. Assist three farmers in conducting fertilizer experiments on corn. (Dan River and Spring Garden Departments.)
16. Have a field demonstration to show the effect of nitrate of soda on the yield of corn. (Dan River and Whitwell Departments.)
17. Get ten farmers to sow lespedeza. (Bros-ville, Climax, Callands and Dan River Departments.)

C. Local F. F. A. Program:

1. Organize a county F. F. A. federation.
2. Hold a federation Father-Son banquet.
3. Hold a county F. F. A. Rally at the Chatham Experiment Station.
4. Each chapter hold a meeting once each month.
5. Engage in some form of co-operative buying and selling.
6. Send 42 articles to the "Chapter Chats."
7. Each chapter raise money to finance activities of the local chapter.
8. All dues paid by October 1.
9. Complete at least 90 percent of all enterprises.
10. Each officer be able to conduct meetings without aid of the manual.
11. Post F. F. A. objectives in the chapter meeting room.
12. All boys enrolled in vocational agriculture be F. F. A. members.
13. Each chapter secure scrapbook for publicity articles.
14. Each chapter aid in beautifying school grounds.
15. Keep the division superintendent and school board informed as to F. F. A. activities.
16. Encourage all second year boys to meet the requirements for the second degree.
17. Have a well planned program at each F. F. A. meeting.
18. Send at least 21 exhibits to the state corn and grain show at Warrenton.
19. Send seven judging teams to the 1936 state corn and grain show.
20. Each chapter send three delegates to each meeting of the federation.
21. Each chapter send two delegates to the state rally in June 1936.
22. Invite the farmers to a special meeting of the F. F. A. chapter.
23. Each F. F. A. chapter put on a special program for its respective school.
24. Stage a party for home economics girls.
25. Co-operate with the Danville Fair Association in putting on the fair.
26. Put on at least one federation radio program.



PART TIME

Farmer Classes

EVENING



Securing Attendance in Part-Time Classes in Agriculture

WAYNE B. GIRARDOT, Agricultural Instructor,
Albion, Nebraska

ATENDANCE in part-time classes in agriculture is the greatest factor in determining the success or failure of a part-time program. The real test of this factor is to offer a program in one community each year for several years and if, after that, the program still commands the interest of the out-of-school group, it may be considered successful.

In analyzing the method of securing attendance three important phases of the work must be considered: the student, the course, and the instructor. The percent of students who finish the course is the ultimate goal. Perhaps, in no other industry is the versatility of the operator so important as in agriculture. The successful farmer must be a manager, laborer, naturalist, mechanic, and student.

First of all, the out-of-school youth has some reason for being out. Any

Several of the natural impulses of the prospective student may be played upon as he is especially alert to activity, curiosity, gregariousness, and competition.

Community entertainments, sponsored by F. F. A. organizations and presented in rural sections, have been found to make very good external connections. Large turnouts are usually present at these gatherings and excellent opportunity is offered for presenting and distributing information. Following these meetings a bulletin, explaining in detail the opportunity and merits of the course, is mailed to each one of the prospective students in a community. The results are usually an adequate enrollment for a good class of part-time students.

Finally the first meeting day for the group arrives and on this day much of the success of the course depends upon

necessary, if the course is to withstand the test of time, which the program is subject to, over a long period. The students' needs must be fulfilled and his wants satisfied.

At the termination of the course, when approved practices are established and better farmers are in the making, certificates of merit should be issued. In our state (Nebraska), the state department of vocational education issues these certificates upon satisfactory completion of the course offered. This year, for the first time, Albion High School offers standardized credit which may be applied towards graduation. The amount of credit is based upon the time attended and the satisfactory completion of the work.

Record Keeping With Part-Time Pupils

HERBERT W. CHAPMAN, Blair, Wisconsin

THE work with our out-of-school group, or in other words, the part-time and evening school classes that the vocational agriculture instructor holds for farm boys and adults, is being recognized as one of the major jobs of the successful teacher of agriculture.

We find that constructive work can be accomplished with this older group, boys who have finished high school; who are 18 to 25 years old; and who are on the farms. They are in a much more receptive frame of mind than the younger boys in school and, therefore, more time must be spent with them.

In order to put over a program that will show results, we must plan for the boy in this group a long-time program of instruction covering a period of several years. This program should be so organized that the boy will be given all the information a good farmer would need.

The problem of record keeping on this out-of-school boy is a big one to most teachers. Besides an individual record card for every boy, instructors will find a record for each boy (Fig. 1) an easy means of keeping track of the skills he acquires. Along with this sheet, it would be well to have a list of skills that a good farmer must have in the different farming enterprises to guide both the boy and the instructor in the educative process of this youth.

RECORD OF SUPERVISED OR DIRECTED PRACTICE OF THE PART-TIME PUPIL

Name of Practice or Job	Practices		Date Completed	Scope Number Units
	Standard or Approved	New or Improved		
Castrate lambs		X	May 1, 1935	10 lambs
Inoculate soybeans	X		May 10, 1935	2 bu.

To me, a report on a boy such as this would mean a whole lot more than some figures on the net profit on some one project, which in most cases is just guess work on either the boy's part or, more likely, on the part of the instructor.

Agricultural Education June, 1936



Graduating Class of Albion, Nebraska, Part-Time School

one of several causes may be the reason for his failure to attend the full-time school, lack of interest, lack of understanding, failure to have knowledge incorporated in his system of thinking, lack of adaptation on the part of the instructor; or, in some cases, financial conditions. In very few cases is the willing boy not given permission to attend school by his parents. The part-time school instructor always has one or more of these handicaps to overcome, if he is to maintain any degree of attendance.

The part-time student is not compelled to attend, he is not in the habit of study and the effort and inconvenience of attending must be overcome by the teaching skills of the instructor. Many hours of careful planning are necessary in order to insure enrollment. Preliminary preparation in laying a good foundation upon which to build, by organization is an absolute necessity on the part of the instructor. Personal solicitation of students in the community, at which time the course may be explained, leaders selected, and inspired to come.

the speed and precision with which the instructor analyzes each student. Conversation and open discussion among the group members can usually be obtained by a few well placed and timely questions asked by the instructor. Usually the group much prefers discussing their own problems instead of having the instructor attempt to offer a solution by lecture. The discussion may be directed into channels of creative thinking and incorporated into their own systems of thinking, by the instructor.

Setting up test experiments on the farm homes of the boys, under actual conditions, has been found very influential in securing the desired results. Once an experiment is under way and operating, interest runs high and the results can easily be measured.

Scintillating novelties offer a glare and glamor to a course which soon wear off, the interest wanes, attendance drops, and the course becomes a failure. A worthwhile course based upon sound and basic principles, and one in which the results can readily be measured, is

After a few years of instruction a boy should have a very interesting sheet to show for his work and efforts, and the instructor would know if the boy was trained for the job of farming.

Recruiting the Part-Time Group and Arousing Interest

ERLE W. WALTON, Vocational Agriculture Instructor, Connersville, Kentucky

RECRUITING the prospects, and introducing part-time work and its purposes is our first problem. I feel that the success of our part-time work will be highly correlated with these first essentials.

I brought the matter of part-time work before my F. F. A. boys; they caught the spirit and assisted materially. We started by making a list of all boys of part-time age out of school. They were divided and listed as to roads or localities. This was during the fall of 1934.

My next move was to visit and make acquaintance with these prospects. I did this during Christmas week, working with the assistance of one of the F. F. A. boys. I find that the F. F. A. boys can aid unbelievably in putting it over, especially if it is a new department, and you are a new man—which I was. They know the boys, and an introduction from one of the most respected of the group will set you off on your best foot.

During my first visit with the prospect I took a part-time survey and gave a general idea of my plans. I decided that we should have some recreation, so I chose basketball—and of course I let this be known, because, as you know, this will arouse interest—and this is in perfect accord with our work.

After the surveys were completed, I set the time for our first meeting. During the next two weeks I published articles in the county papers, inviting all and giving the time of the first meeting.

I held fourteen meetings and wrote minutes of the happenings of each meeting. With the aid of the minutes of my first meeting I will give you an idea of how I went about it.

The first meeting opened with an enrollment of 21. I gave a general outline of what we planned to accomplish in our part-time work; then gave my plans for conducting our school, afterwards asking for suggestions from members. I read an outline of proposed subjects for study, reminding them that it was their school and that we would take up the things with which they were most concerned. We elected two captains from the group. Each man wrote his name on a slip of paper, and the captains drew for those to be on their sides. The group agreed that we would promote a contest between the two divisions as to attendance and winnings in basketball. It was further agreed that the losing side give the winners a party at the close of our school.

The enrollment increased to 28, average attendance for the fourteen meetings was 16. We met weekly on Tuesday and Thursday evenings, with the exception of twice when weather conditions would not permit.

I realize that probably the young teacher will feel meek toward part-time work because a majority of the group will be his age and older. I might add that I received the best of respect and appreciation from the group.

My Experience with Part-Time Instruction

B. E. STICKROD, Vocational Agriculture Instructor, Jasper, Missouri

THE town of Jasper, Missouri, is located in the southwest corner of the state. It is a town of 800 population, surrounded by a level to gently rolling land. The major enterprises are dairying, poultry, small grain, and pastures with a minor of sheep, hogs, and a few beef cattle.

There are at present 52 boys enrolled in the all-day classes. The department has been in operation for the ninth year.

I began thinking of part-time work in 1931 while located at another school, but I was somewhat in fear of what the results might be at that time. I wrote to several teachers in other states who had carried part-time work and read articles in books and the Agricultural Education magazine of the experiences of others.

In October of 1934, our Assistant State Supervisor, C. L. Angerer, mentioned and talked part-time work in our district conference. This started me thinking. I wrote an article in the local paper about part-time work and asked for opinions of eligible boys. I had 12 inquiries on it and then organized for a meeting.

The first meeting was in February of 1935 with six present and by the fifth meeting, the enrollment was 21 boys. I made a survey of these boys and found they traveled from 2 to 10 miles to this class.

We held the meetings each Wednesday night for 2 hours until May. I then we discontinued the class until fall.

The boys made out the program in a seasonal sequence under my guidance. Certain approved practices were investigated and many were put into practice by these boys.

The next fall we started with eight boys and by the third meeting we have a total enrollment of 19 boys. Three of the boys drive 20 miles to these meetings.

Our job analysis has been adopted by these boys until May of next year. The boys will be awarded a certificate of award at commencement time by the president of the agricultural department's advisory board. The certificates will be based on 60 percent attendance and putting into practice four approved practices adopted by the class throughout the year.

A great deal of interest is manifested at present in management and economics. Many of the boys are planning to buy good Jersey heifers upon seeing the dairy cycle as it is.

The procedure in class is discussion based upon their experiences, then I bring in the scientific facts, after which we make our conclusions, which are mimeographed and distributed at the next meeting.

Study is at the choice of the boys, as the eighth graders and high school graduates would be in a different class if study was required.

We are having our class for one and one-half hours and recreation for one hour.

I am not sorry I started this school for it has been a great deal of pleasure to me for the following reasons:

1. Closer contact with out-of-school boys who are being neglected by the schools and other organizations.

2. Giving new methods in agriculture to boys who are farming at present but who might not get started right.

3. Introducing approved practices on farms that otherwise I would not contact thru all-day boys.

4. Teaching boys who have realized their mistakes by not going to school and who are desirous of obtaining information on practical farming.

These boys must be kept interested. If the lessons are brought forth in an interesting way, they will keep coming. But if interest wanes, no attendance. There isn't any requirement for them to keep coming, so they must be dealt with a little differently than the average high school boy.

I am very proud of these boys and their accomplishments and heartily endorse part-time work. I invite any instructor to visit our classes any Wednesday night and observe the earnestness and conscientious feeling the boys have towards their work.

Co-operating Agencies Assist With Part-Time and Evening Program

H. O. SAMPSON, State Supervisor, New Brunswick, New Jersey

AFINE spirit of co-operation between the college of agriculture and the vocational agriculture division of the state department of public instruction is found in New Jersey. An example of this was shown recently when Mr. H. A. Miller, vocational agriculture teacher in Atlantic County, brought a group of part-time and evening pupils to the college for a day where they were given instruction in fruits, vegetables, and farm economics by college professors and extension specialists. The subjects stressed in the fruit and vegetable enterprises dealt with new developments in these fields, as well as older approved practices. In farm economics, the farm outlook for 1936 was the subject discussed.



The men and boys spent the whole day at the college. In spite of slippery roads and snow, there were 30 in attendance. In addition to the group from Atlantic County, seven boys from the part-time agriculture class of the Mt. Holly High School were present.

We are now holding a series of conferences in the rural counties of the state where they are discussing the problems of out-of-school youth with county superintendents of schools, vocational agriculture teachers, county agricultural agents, and county club agents. It is hoped that thru these conferences there will be found ways of broadening and strengthening the work of both agencies.

More About Out-of-School Rural Youth in Iowa

J. A. STARRAK, Iowa State College, Ames

CONSIDERABLE publicity has been given in the May, 1935 issue of *Agricultural Education* and other journals to the investigation of out-of-school rural youth in Iowa, conducted by the writer in 1934. The fact that 500 copies of the report have been distributed upon request, to all parts of the United States, is indicative of the high interest prevailing in this problem.

Two rather significant items of information secured in the survey were not included in the report. One has to do with the mental ability of these out-of-school youth and the second deals with their occupational choices.

Mental or Scholastic Ability

Several persons to whom the writer has expressed his sympathy for these under-privileged youth have countered with the suggestion that probably the great majority of them did not possess sufficient intellectual capacity to profit from any additional formal education and that therefore any concern for their lack of educational opportunity was unwarranted. Such, however, does not seem to be the case.

In the construction of the survey blank this attitude had been anticipated and in it were included some questions to be asked of school administrators and teachers, regarding the scholastic ability demonstrated by these young people while in school. In short, the interviewer was requested to secure an opinion or estimate of each young person's ability as a student either directly from administrators and teachers or from an examination of the school records. Estimates were thus obtained of 765 out of the 1107 young people interviewed. The

education of the remainder had been limited to that of a one-room school, and it seemed impossible, mainly perhaps because the investigation was conducted during the summer vacation, to secure corresponding information concerning them.

Table I summarizes the data thus secured. The distribution of the different grades of ability follows the normal distribution curve closely enough to give considerable confidence in the validity of the opinions.

The general conclusion to be drawn from this table is that, altho the average scholastic ability of those who graduated from high school was distinctly superior to those who dropped out before graduating, there is evidently a relatively large proportion of the latter who made a good record while in school. It will be noted that while 9.5 percent of the graduates were rated "superior," 5.2 percent of the ones who failed to complete the high school courses received a similar rating. 15.7 percent of the latter were rated as "good," 39.6 as "average," 33.8 as "poor" and 7.6 as "very poor." Inasmuch as 15.6 percent of those who graduated were rated as "poor," it is only fair to assume that, all or at least a considerable portion of the "poor" ones (33.8 percent of the total) of those who did not graduate could have done so, as far as their scholastic ability was concerned.

The writer is not necessarily subscribing to the idea that "scholastic ability" is to be the sole criterion of the right of an individual to continue in school. The traditional curriculum of the school is too bookish and too narrow in its intellectual appeal, to be regarded as an adequate "measuring stick" of the ca-

capacity of an individual to profit from an educational experience adapted to his peculiar abilities and needs. We have too many examples of persons who, tho dubbed in schools as dunces, afterwards earned the acclaim of their fellows by rendering very significant and badly-needed services to mankind.

If the curriculum of our high schools were more adequately adjusted to the needs and activities of real life it is possible, indeed probable, that an equal proportion of those of our youth who did not complete high school would have demonstrated high "scholastic" ability. But it is significant that so large a proportion (much over 50 percent) of those who did not graduate were intellectually capable of doing so. We can also be quite sure that the lack of the opportunity was the limited factor in the failure to graduate in the great majority of cases. Information contained in the original report seems to substantiate this quite fully.

Occupational Choice

One section of the survey blank employed had to do with the vocational status of the out-of-school youth. Among other things each was asked to state his occupational choice. These choices were then compared with the occupation of their parents. Table II presents the data thus obtained. In many of the occupations listed the number of cases included is too small to allow any very definite conclusions to be drawn.

Of interest to teachers of agriculture is the large percentage of farm boys who express a desire to follow farming as an occupation. Evidently, however, a good many of the occupations in which their fathers earned their daily bread did not appeal to the sons. Only three occupations other than agriculture were regarded favorably by even a small proportion of the sons of the fathers engaged therein. A reference to one of the tables published in the original report answers the question as to the occupations given as first choice by these youth.

The corresponding data for the girls submitted in the right hand side of the table should not be interpreted too liberally lest one may become alarmed over the great impending scarcity of homemakers of the future. While it is true that only 27.4 percent chose the occupation of their mothers (homemaking) doubtless by the very nature of things, many more will find themselves homemakers in due time. Doubtless a similar survey of the hopes of their grandmothers would have secured a more favorable response towards homemaking, since in that day very few other activities were open to women. Just why the daughters of farmers, truckers, clerical workers and employees of municipalities should be so much more favorable toward homemaking than the daughters of workers in the other occupations listed, must be left to the imagination of the reader.

IMAGINATION without practical ability and labor avails nothing. Absolutely nothing. If a dreamer is not a doer he is another Rip Van Winkle. —Joseph Faus.

TABLE I.

Rating on Scholastic Ability	Those Graduating Before Leaving High School		Those Leaving Before Graduating from High School		Total Group of Young People Out-of-School	
	Number	Percent	Number	Percent	Number	Percent
Superior.....	40	9.5	18	5.2	58	7.6
Good.....	110	26.0	47	13.7	157	20.4
Average.....	203	48.8	136	39.6	342	44.7
Poor.....	66	15.6	116	33.8	182	23.7
Very Poor.....	0	0	26	7.6	26	3.4
Total.....	422	100.0	343	100.0	765	100.0

TABLE II.

Father's Occupation	Number of Sons	Sons Choosing Father's Occupation		Sons Not Choosing Father's Occupation		Number of Daughters	Daughters Choosing Mother's Occupation		Daughters Not Choosing Mother's Occupation	
		No.	%	No.	%		No.	%	No.	%
Farming.....	449	278	61.9	171	38.1	147	54	36.7	93	63.3
Tradesman.....	36	5	14.9	31	85.1	32	2	6.2	30	93.8
Labor.....	32	0	0	32	100	8	1	12.5	7	87.5
Professional.....	5	0	0	5	100	3	0	0	3	100
Small business.....	8	2	25.0	6	75.0	6	1	16.6	5	83.4
Mgt. of business.....	13	0	0	13	100	3	0	0	3	100
Miner.....	5	0	0	5	100	2	0	0	2	100
Trucking.....	6	1	16.6	5	83.4	4	2	50	2	50
Clerical.....	4	0	0	4	100	2	1	50	1	50
Rural letter carrier.....	3	0	0	3	100	5	0	0	5	100
R. R. laborer.....	7	0	0	7	100	3	0	0	3	100
R. R. inspector.....	4	0	0	4	100	3	0	0	3	100
Municipal workers.....	5	0	0	5	100	3	2	33.3	2	66.7
Government, C. C. C. and game warden.....	2	0	0	2	100	2	0	0	2	100
Miscellaneous.....	5	0	0	5	100	0	0	0	0	0
Total.....	584	286	48.9	298	51.1	227	62	27.4	161	72.6

The Part the Alumni Played in Organizing and Teaching a Part-Time Class

J. S. IRVINE, Teacher of Agriculture,
Washington College, Tennessee

WHEN visiting the farmers of the community or doing supervised practice follow-up work among the boys in agriculture, I had an opportunity to meet and talk with many of the out-of-school farm boys about a part-time class during the winter of 1934-35. Many of these young men had recently lost their jobs in the cities and had returned to the farm to make a living. They had no place much to go at nights and were restless. They wanted to do something. But the opportunities at home and in the community were very limited and of a very inadequate nature. As a result most of them seemed interested in a part-time class.

At the regular November Future Farmer Alumni meeting, I discussed the possibility of a part-time class. The members of the alumni present expressed a deep interest in the project and volunteered to help organize and conduct the class.

A survey was conducted by the members of the alumni. While making this survey, the part-time class was explained and each young man was invited to attend. The entire school patronage area was covered. The results of the survey were tabulated and presented at a December joint meeting composed of the alumni and the advisory council of the Washington Chapter of Future Farmers, which is made up of the county superintendent of schools, the principal of the high school, a banker, a lawyer, and five key farmers of the community. Much to the surprise of all, the survey showed that there were 357 young men in the community between the ages of sixteen and twenty-five on the farm out of school.

At this joint meeting it was decided to organize a part-time class. Plans were made including the place, time and frequency of the meetings, methods of transportation, teachers, unit courses to be taught to meet the needs of the pupils, and the schedule.

Washington College high school was selected as being the most suitable place for the class, as it was centrally located and had electric lights, steam heat, suitable equipment, and sufficient classrooms. The principal of the high school was present and offered free of charge the building and any members of his faculty who might be needed.

The county superintendent of schools offered the school busses which haul the pupils to the high school daily free. These busses were routed so as to bring in one hundred part-time pupils. Twenty automobiles owned by members of the alumni were offered free to help bring in young men who lived off the bus routes.

Five members of the alumni were graduates of the high school with four years of agriculture, who had had special training in an agricultural college or who were graduates of an agricultural

college, volunteered to teach units in the part-time class.

In order to meet the needs of such a large group of part-time pupils, classes of instruction were offered in poultry, dairying, livestock, farm crops, gardening, orcharding, co-operative marketing, Federal contracts and farm records, soil improvement, business arithmetic, English, diet, health, dress and etiquette, home beautification, and farm shop.

Other alumni members were used to keep attendance records, records of those agreeing to carry out certain supervised practices, to conduct new members to classes, and to aid in the social get-together, fun, basketball, and volleyball period in the gymnasium.

At our first meeting we enrolled 163. The class steadily grew at each meeting. The total enrollment was 317.

At a meeting of the alumni after the close of the part-time class, the members of the class were grouped into small units living in the same community. In each one of these small units, a member of the alumni was selected to help the teacher of vocational agriculture supervise the home practices.

Vocational Farmers Organize

THOMAS E. MABERLY, Instructor,
Rupert, Idaho

FOURTEEN high school graduates and former members of the Rupert Chapter of Future Farmers of America, met in the agricultural room of the school to start a new organization which they decided to call the "Vocational Farmers of Rupert." Such names as "F. F. A. Alumni" or "Young Farmers" did not appear completely representative names, because they hope to interest all young men on farms who feel the need for educational and social inspiration regardless of whether they have been fortunate enough to attend school previously or not. The group believes the name to be most satisfactory and indicative of the desires and ambitions of the membership.

According to the constitution just adopted, the organization is composed of young men who are established in farming or have definite plans for becoming farmers and who wish to take advantage of the educational opportunities of the department. The purposes of the organization as set forth are:

1. To provide a separate organization for "Future Farmers of America" who have completed high school, and other farm young men of like age.
2. To hold together farm young men of like interests who are now in between the strictly adult organizations and the high school organizations.
3. To provide social contacts for farm young men.
4. To promote continued study of agricultural problems.
5. To aid farm young men in becoming established in farming.
6. To help farm young men earn money on farm business ventures.
7. To promote co-operative effort.
8. To aid farm young men in finding themselves.
9. To stimulate interest in farming.
10. To develop rural leadership.

The boys decided to hold regular business and social meetings once a month and educational meetings once a week

(Continued on page 192)

Proposed Two-Year Course for Part-Time Classes

G. B. THACKSTON, District Supervisor,
Middle Tennessee

COURSE units listed for each year may be interchanged or subjects within the courses may be interchanged to meet the needs of each particular class.

FIRST YEAR

I. Agriculture.

Teach the production of those crops and types of livestock best suited to the community, and in which the members of the class are most interested. It is not necessary to teach all of the jobs of an enterprise—only those that need improvement in the community.

The enterprises to be studied should be selected by the class—as indicated by their interest. The jobs within the enterprises should be selected by comparing the practices of the community with experiment station data and approved practices, and then deciding what jobs need improvement.

Ordinarily, strictly agricultural subjects should not take up more than half of the entire teaching time—that is, if you expect to teach twenty class periods, about ten should be sufficient for agriculture.

II. Farm Mechanics.

1. Care and Repair of Farm Machinery and Project Equipment.

Have members bring in plows, mowers, etc., and completely dismantle them and rebuild. If members of class do not own any farm machinery themselves, do this for some neighboring farmer. The owner of the machinery to pay for all new parts needed, paint, etc.

References: Farm machinery catalogs.

John Deere's machinery book.

Farm Mechanics, Cook, Scranton, McColly.

Farm Mechanics, Dr. Davis.

2. Rope Work.

(Use this on bad days when it is necessary to stay in close to the fire.)

Let members bring in the necessary lengths of rope to make rope halters, splices, simple knots, etc.

3. Tool Fitting.

Have each member collect and place together in some convenient place about the home or some out-house, all of the shop tools on his home place. Make an inventory of these. Then make a plan for gradually adding other tools that are needed.

Make work benches, saw horses, etc., for these home shops.

Have members bring their own saws, chisels, hatchets, etc., from home and sharpen them. Also replace handles, etc., that are needed.

4. Lumber Measurement.

Go to a near-by lumber stack and actually measure and estimate the content of different pieces of lumber. Then calculate a bill of material for a hog house, chicken coop, wagon box, etc., etc.

III. Farm Business.

1. Letter Writing.

Practice writing orders for bulletins, seeds, price quotations, farm machinery, tile, lumber, clothing,

(Continued on page 192)



Farm Mechanics



Evaluating Individual Effort in Farm Mechanics

CARL G. HOWARD, Moscow, Idaho

THE scale used to evaluate the effort of individuals in farm mechanics courses is non-essential. Regardless of the system which is set up in a school for this rating or evaluating, no justice nor adequate measurements may be brought about unless the scale or system provides for individual differences in persons, variation in home farm conditions, age range, individual interests, hobbies, and preferences of class members, and is flexible in operation, but exacting in results.

It may seem to be self-contradicting to say that the scale is non-essential but its use is essential. Yet that is exactly what seems to be the truth of the situation, and has been proved over some 15 years teaching and supervision experience.

Some variation, modification, or adaptation of the point system of grading farm mechanics work is now in use in all of the farm mechanics sections in all of the vocational agriculture departments in Wyoming. Teachers have been supplied with tables showing how many hours of work should be done and points which should be allowed for it in the various farm mechanics enterprises into which the work naturally divides itself. Suggested required and elective jobs have been given them. Table showing how a varying number of points earned means a variation in grades. Suggested grade schedules, in other words, have been provided. In addition a sample shop card for each boy to record his activities has been suggested. This has further been elaborated to show a sample master wall chart for recording all points earned in the various enterprises. The reason for all of this suggestive material was to aid teachers in setting up, elaborating, or improving a scale or system for evaluating the effort of the individual in the farm shop.

Offhand one would say that if all of these suggestions were followed and the previous scale or system adapted to this procedure as outlined, the problem of evaluation would be solved. But that is not true for the opening statement of this article still stands. The problem is not even touched upon except that the scale or system which lends itself best to use, modification, and unusual circumstances gives the teacher a head start in his evaluation over the one whose scale or system does not lend itself so well to use, modification, and unusual circumstances.

One would say, then, that if the scale



C. G. Howard

or system followed is non-essential, what is essential in evaluating effort?

The answer is the manner in which each individual uses his scale or system regardless of how archaic or modern it may be. A teacher may render strict justice and exercise all fairness, giving to each boy exactly what he deserves under any scale or system. However, the more elastic and modern the system, the easier this becomes.

Assume a point system in a farm mechanics course where the various enterprises each carry one or more required jobs sufficient to use one-fourth to one-third of the shop time. Assume further a listing of sufficient elective jobs for each boy to encounter no difficulty in the use of the remainder of his shop time. Assume too, one or more large jobs in the nature of sheep wagons, pinch shutes, etc., which may fill in the time of boys who seem to have little of their own work to do. Assume a shop card system in operation—and a master wall chart kept up-to-date. This would seem to be an ideal score or system for a farm mechanics department and would seem to provide a wonderful means of evaluating individual effort.

However wonderful the means, the evaluation may be pitiful or excellent depending upon its use. One boy may devote all his time for a semester earning points in leather work where a suggested minimum is 20, in effect earning over 100 points. If he is given a grade on points earned the scale or system is not at fault but its use is because no check was made on the distribution of points among various farm mechanics enterprises.

Again holidays, demonstrations, absence of teacher, and other factors may cut down the number of points each boy may earn in a given period. Unless a modification is made before evaluation is attempted everyone will fail for that period.

Unless every teacher has displayed on his bulletin board an estimation of the point allowance for every job before it is attempted, the boys do not get a fair shake.

Unless each boy keeps a record of points earned and the teacher transfers it to the master wall chart periodically and points out where enterprises are skipped or hit too heavy boys cannot be expected to develop skills which are essential to turning them out as proficient in farm mechanics.

Unless a job is satisfactory and points allowed, or unsatisfactory and destroyed, with the same number of points allowed for all satisfactory like jobs with cuts made in number of points allowed for repetition, there is no reason to call a boy poor, average, or superior.

Unless provision is made for farm mechanics jobs done on the home farm, the teacher is neglecting his most efficient carry-over onto the farm and preventing carrying skills to the level of doing ability in all enterprises.

One could go on indefinitely listing exceptions and difficulties to which any scale or system is heir. The fact remains that every boy in every farm mechanics class is a cog in the wheel and is entitled to be thoroughly familiar with the machine of which he is a part. He is also at the same time an individual different from every other individual in the machine, and as such is entitled to special consideration and application of all the regulations which govern the more normal individuals.

The only thought which is intended then is the one idea—that every teacher has a group and individual responsibility in setting up the best score or system for evaluating individuals which he can devise and that his use of this rather than the system itself measures his success or failure as a teacher of farm mechanics to vocational agriculture boys.

Re-Thinking Farm Mechanics in Iowa

DR. H. M. HAMLIN, Iowa State College, Ames, Iowa

AS a part of the program for replanning vocational agriculture in Iowa, an attempt is being made to work out a better arrangement for farm mechanics. Several trials of new arrangements are being made and others will be made soon.

Three principal objectives are sought: 1. The reduction of time given to farm mechanics in the ninth grade.

2. The continuance of farm mechanics instruction in the upper grades.

3. The closer relationship of mechanics instruction to the balance of the vocational agriculture curriculum.

Some schools are now giving only a semester of farm mechanics in the ninth grade, postponing the other semester to the eleventh and twelfth grades. Others are introducing units dealing with farm machinery and power, farm buildings, and farm utilities in the twelfth-grade farm management course. Still others are introducing more related mechanics work into the courses dealing with livestock and crop production.

It is believed that under any of these newer programs, important phases not now included or poorly taught because instruction must be given to ninth grade boys, will receive much more adequate attention. It is also believed that a better ninth-grade program in agriculture can be given if the time set aside for farm mechanics is reduced.

With these changes in the high school program and the increasing attention being given to farm mechanics in part-time and adult classes, this portion of the agriculture program can be expected to function much more satisfactorily in Iowa in the future.

Wisdom consists in knowing what to do. Skill consists in knowing how to do it. Virtue consists in doing it.

—David Starr Jordan.

Are You Growing With Your Job?

REX E. RUCH, Teacher of Agriculture,
Denison, Iowa

THERE is a possibility of shop instructors stagnating on a planned course of study made out several years ago. The course, no doubt, was at the time adequate and satisfactory, but it may now be in need of revision.

The depression and the drought have made necessary radical changes in curriculum and teaching procedure. Farm purchasing power has been low. According to our economic statisticians this purchasing power has been on the increase recently, but in many communities the farmer has very little to sell, and is in no better position to finance shop projects now than he has been in the past few years.

The farmer who a few years ago would gladly finance the construction of a wagon box, self-feeder, or an individual hog house today is not financially able; neither is he able to buy leather for harness repair or other expensive repair materials as he previously did. The shop course must change to meet the new conditions.

A versatile instructor will meet the woodworking problem by spending more time on replanning farm buildings and estimating bills of material for the changes. A local lumberman will gladly estimate some bills of materials which may be compared with your boys' estimates. This comparison proves to be very inspirational as well as educational for the boys. Old lumber must take the place of new material in many of the wood construction projects. We are attempting to meet the high cost of leather problems by tanning hides according to the hide tanning formula recently published in this paper (January, 1936), thanks to the instructor in the west who had the initiative to investigate and publish this formula. We are substituting more forge work for a part of the time previously used in repairing machines and engines. It is remarkable what can be made in the nature of cold chisels, punches, nail pullers, and wrenches from old hay-rake teeth, car springs, old files, and pieces of scrap usually found in abundance on every farm. If the members of your local school board are made to understand the situation they may be induced to purchase pipe-cutting and -threading equipment or other tools necessary for the proper development of the shop under existing conditions.

Electricity available for farmers will no doubt soon be a reality. It may be distributed by the Federal Government similar to the mail and parcel post service. The underwriters prevent farmers from doing wiring unless under careful supervision. Nevertheless, much information on electricity and electrical appliances should be made available to farmers. The picture changes; we must advance with the times.

One consoling feature of the present situation is that it is making better shop teachers. We are forced to meet the new situation and expand our program along different lines. I firmly believe that a shop instructor should attempt to add at least one new unit to his curriculum each year. It keeps up his en-

thusiasm and some way he will find time to offer those things which are more practical. Why not plan to do something new next year? Obtain a forge and do more metal work; tan a hide; thoroly repair a mower or binder if it can be easily financed; add a unit of electric wiring; attempt to add some pipe-cutting and -threading tools or other new inexpensive equipment. Why not try these or at least one other new unit never before taught in your shop? It will increase your enthusiasm. It will have a broadening effect on you which will cause you to grow with your job.

Classroom Instruction in Farm Mechanics

W. A. FREY, Instructor of Agriculture,
Carrington, North Dakota

THE classroom instruction of farm mechanics is seldom given a great deal of time. Probably the two main reasons why teachers have not given more time to classroom instruction are: (1) There have been no shop books suitable for class texts or basis references. (2) It is easier to let the students go directly into the shop and begin work even though the work sometimes may largely be busy work.

There has been in the past less reliable reference material available in this course than in any other subject taught in high school. About four years ago, I attempted to have classroom work in farm mechanics, but it seemed to become monotonous for the students. One reason for this was that we had references from so many sources on a few things that it took most of the students' time finding them. This was rather discouraging to me since it was impossible to take eighteen or twenty students into a shop and give help when needed. Without giving this help, the students had to learn by themselves and this was a costly method. They invariably either spoiled the material they were working with, or the tools. We are fortunate in having more worthwhile references now.

While it is easier merely to let the students go directly in the shop and try to find something to do, I believe that there are many jobs that should be studied and discussed in the classroom. Some of these jobs are classifying lumber; selecting and caring for lumber; selecting and using bolts, screws, nails, etc.; classifying tools; rafter cutting; figuring bills of material; reading drawings, etc.

It seems to me that a boy should know what kind of lumber, nails, bolts, hinges, etc. to select for each type of project, that he should know what tools to select and how to use them. I prefer to have the student study what materials to select and how to perform the job before going into the shop.

The general plan of teaching farm mechanics which I use is as follows:

1. The students decide on a job they want to do.
2. The students set up, with the teacher, problems relative to the job.
3. The students study these problems.
4. The students discuss the problems.
5. The teacher gives a demonstration on how to do the job.
6. The students then go into the shop and do the job.

While it does take time for class dis-

cussion and consequently leaves less time for the doing of the jobs in the shop, I believe it is better to teach a few jobs well than to cover a lot of jobs haphazardly.

A Lesson Sheet in Farm Mechanics

M. A. SHARP, Department of Agricultural Engineering, Iowa State College, Ames

IF WE are going to help the boy to develop his ability to think, we must provide opportunity for practice. The following procedure may be used in most cases where a boy has decided he wants to do a certain piece of work. It is adaptable to almost any project if changes are made to fit the situation. Each pupil has this outline to fill out. There should be space left after each item for the boy to write in his answers.

Poultry Self-Feeder

1. Make out a list of reasons why you want to make a self-feeder for poultry.
2. What are the important factors to be considered in designing and constructing a self-feeder?
3. How large a feeder do you need?
4. What kind of feed will be used?
5. What type of feeder do you think will be best for your purpose?
6. Where may you obtain plans for feeders?
7. What improvements could you make in plans you have studied?
8. If none of the plans available is satisfactory, make a working drawing of the feeder you want to make, or a sketch showing improvements to be made in plans you find satisfactory except for minor changes.
9. What kind of lumber would be best for your feeder?
10. Make out a list of materials needed, and figure out what they will cost you. Estimate the number of hours it will take you to make this feeder.
11. Make a procedure outline, showing the order in which the various construction and assembly operations should be done.
12. Be sure you have read all necessary references, especially regarding new tool or assembly operations. Do not start to make the feeder until the instructor has approved your answers to these questions, and your plans for construction and financing.

After the project has been constructed, answer the following questions, and turn in this paper with your project for final approval and grade.

1. What new operations did you learn?
 2. What mistakes did you make?
 3. How could you improve the design to make construction easier?
 4. If you were making another feeder, what changes would you make?
 5. What did you learn on this job that will be of benefit to you in the future?
- List of references to be used by pupil. Whenever possible, if the group as a whole is ready for discussion of poultry self-feeders, give each pupil his outline, and discuss the common questions as a group. Each pupil will then fill in his outline in detail as suits his particular case. However, the greatest value of this type of lesson sheet is for individual pupil use.



Future Farmers of America



What's the Hurry?

Calico Rock F. F. A. Chapter, Arkansas, V. H. WOLFORD, Adviser

AMISCHANCE, misstep, mistake in judgment, or mistiming all lead to mishaps, misfortune and misery. Picture victims along the road nursing broken heads, bloody faces, fractured arms, legs, and ribs. Then, too, picture the dead ones.

During the past three years there has been a steady increase in motor vehicle accidents which have resulted in a large number of fatalities and injuries. This situation has become so serious that it presents one of the largest fields for improvement that we have had in years. The motorist can do much to reduce the number of accidents and prevent the loss of life and limb. A little more consideration for others, a little less speed at doubtful places, and keeping fit at all times for driving will work wonders. We can't control the weather, but we can control the accidents. Then we have other phases of causes of accidents to deal with: the speeder, drunken drivers, carbon-monoxide gas, pedestrians, road hogs, train-auto duels, children's protection, hitchhikers, traffic lights, signs and signals, the inexperienced, intercepted pass, and one-arm drivers.

It's up to you, Mr. Motorist, to do something about this. Yes, and it's also up to organized effort to bring this important question before the nation. The Calico Rock Chapter has gone ahead along this line of endeavor and has adopted the following resolution and driving code in order to do its part in this great need of safer driving.

"We, the undersigned members of the Calico Rock Chapter No. 74 of the Future Farmers of Arkansas, realizing the steady increase in motor vehicle accidents in Arkansas which have resulted in a large number of fatalities and injuries, deem it pertinent and opportune to act in such a way as to cause this large loss of life and accompanying injuries to be lessened.

"We, therefore, wish to go on record as a body of young men pledging ourselves in an organized move to exercise greater caution in driving, to show more consideration for the other fellow than has heretofore been in evidence and to eliminate the hazards in driving which endanger the lives of the people and lead to mishaps, misfortune, and misery."

Driving Code of Chapter No. 74

1. Keep your car under control at all times. Drive in such a manner and at such a speed that the car can be stopped in the distance that is seen to be clear ahead.
2. Be sure brakes are in good working order.
3. See that both headlights and tail-

light are working: headlights adjusted so they illuminate the road but do not blind approaching driver; use dimmers when meeting other cars.

4. Keep on the right side of roadway; don't straddle or hug the center line.

5. Don't pass another car until you can see that the way ahead is clear for a safe distance. Remember this rule on hill and curves.

6. Don't drive at a speed that may endanger yourself or others.

7. Proceed cautiously at intersecting highways and when meeting pedestrians.

8. Don't permit passengers or merchandise to crowd the driver's seat.

9. Give your whole attention to the job of driving.

10. Have consideration for the other fellow. It's partly his road, you know."

The above resolution and driving code was signed by the 48 chapter members. The Calico Rock Chapter would like to see each F. F. A. chapter in the United States adopt this resolution and have the signatures of 105,000 members attached thereto. If proper support to this move is given, we will have visible results in causing the operation of motor vehicles to become safer and we will be instrumental in protecting life and property.

The Dublin, Texas, Future Farmer Improvement Contest

A. J. SPANGLER, Area Adviser, Stephenville, Texas

ONE of the major problems of the teacher of vocational agriculture is to get the improved practices, which form the basis of the supervised farming programs of his pupils, permanently incorporated into the home farming program.

Keenly aware of this difficulty and also of the lack of continuity of many of the supervised farming programs of his boys, Mr. J. H. Taylor, instructor in vocational agriculture in the Dublin, Texas, High School, himself a former pupil in vocational agriculture, cast about for some way to make his teaching more effective.

Basing his idea on the activity point system, used by some chapters in evaluating their supervised farming programs, Adviser Taylor sold his chapter officers on the idea, and with them worked out an outline of an improvement contest the summer of 1934.

That fall the chapter officers sold the idea to the entire chapter. Committees were appointed on various phases of the contest and at the end of about two weeks' time, the Dublin Future Farmers Improvement Contest was worked out, mimeographed, and under way.

It proved a success from the start,

because the boys worked it out. The executive committee kept a constant check on the work of the various subcommittees. Progress reports were made regularly. Donors of the various prizes and the public were kept informed by the chapter reporter, of the progress of the contest thru frequent news stories.

The Future Farmer Improvement Contest was adopted as an objective for all the 65 chapters in Area IV by the advisers in their summer conference.

This outline has been abbreviated. Further details may be secured from the writer. Credit should be given the following teachers for preparation of the outline for the contest: J. H. Taylor, Chairman, James Logan, V. A. Underwood, W. W. Reed, E. I. Boon, J. M. Bird, and V. P. Riley.

PURPOSES

1. Gives the boy an inducement to carry out a better program.
2. Brings a closer tie-up between teaching, supervised practices, and your F. F. A. program.
3. Aids in summing up what has been done during the year.
4. Prizes offered are in line with your teaching and farming program.
5. Gets more results done on the farm in improvement practices.
6. Brings a closer tie-up between dads and what the boy is doing.
7. Brings a closer tie-up between dads, business men, and others with the vocational agriculture program.

SOURCES OF PRIZES

1. Livestock breeders
2. Poultry men
3. Nursery men
4. Lions Clubs, Rotary Clubs, etc.
5. Gins and compress men
6. Brooders of seed
7. Business men

PRIZES TO AWARD

1. Registered heifers, gilts, baby chicks, ewes, etc.
2. Fruit trees, pecan trees, etc.
3. Medal (F. F. A.) for best boy in F. F. A. section.
4. Certified cotton seed, grain sorghums, and corn.
5. Pasture mixed.

FUTURE FARMER IMPROVEMENT CONTEST, REVISED EDITION FOR 1935-1936

Name Voc. Agr.
In the promise of better days thru *Improved Ways*, I enter the Dublin Future Farmer Improvement contest in order that I may:

1. Improve my ability to better understand and solve our farm problems.
2. Improve conditions on my home farm.
3. Improve farm conditions in my community.

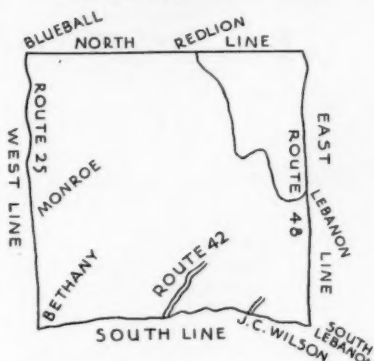
Rules of Contest:

1. Points shall be awarded for each operation performed by the contestant.
2. Points shall be awarded for each operation that the contestant assists his father in performing.
3. Points shall be awarded for each operation that the contestant assists his neighbor in performing.
4. Vocational Agriculture I students shall be judged on Section I to VI inclusive.
5. Vocational Agriculture II students shall be judged on Section I to VIII inclusive.
6. Vocational Agriculture III students shall be judged on Sections I to VIII inclusive.
7. Points awarded for each operation are given under the operation.
8. Vocational Agriculture III students who have not had Vocational Agriculture I shall omit Sections VII and VIII.
9. Local chapter rule when contest starts and closes.
10. Points shall not be awarded for duplication of jobs under various sections.

SECTION I.—Future Farmer Activities.	Units Performed	Units Points
Full standing F. F. A. Member 50 points	_____	_____
Officers of local chapter 25 points	_____	_____
Receive G. H. Degree 15 points	_____	_____
Future Farmer Degree 50 points	_____	_____
Lone Star Farmer Degree 150 points	_____	_____
Attend Dallas Fair on F. F. A. Day 10 points	_____	_____
Bring dad to banquet 25 points	_____	_____

Fox Drive

Saturday, December 15, 1935



The above outline shows where the lines will start. All lines start at 9:00 A.M.

North line will meet:

Blueball

Redlion

Intersection of 48 and Blueball Pike.

East line will meet:

Intersection of 48 and Blueball Pike.

Lebanon

South Lebanon

South line will meet:

South Lebanon

J. C. Wilson's Corner

Bethany

West line will meet:

Bethany

Monroe

Blueball

Eats at the center-finish of drive. Benefits will go for educational use. No guns or dogs allowed.

Have respect for property.

Stay back in line when coming to center, PLEASE.

PLEASE listen to the Captains.

LETS MAKE THIS A BIG DRIVE
—TO HELP THE FARMERS.

Sponsored by the Vocational Agriculture boys of Lebanon, Ohio.

Producing Baby Beef

(Continued from page 181)

Visiting days during the year are helpful.

5. It teaches the feeder the proper relation between crops and livestock. Fully 80 percent of the feed should be grown on the home farm. Supplementary feeds are essential and make for economy.

6. The value of a balanced ration can be learned easier and will be more lasting in its effect.

7. It motivates the school work.

8. It provides a valuable lesson in showmanship.

9. It provides lessons in co-operation, business, and finance.

10. It broadens the learner's perspective thru travel.

F. F. A. Chats

A Veritable Deed of Co-operation

Alabama—Lifting the burden of the crippled children was the motive of the Future Farmers and Future Homemakers of Alabama in presenting State Superintendent Keller a check of \$7,366.41. Thru deliberate individual effort the members of more than 250 chapters of these two dynamic organizations earned

and donated money to be used in purchasing equipment for convalescents, for Alabama's crippled children. This is a striking example of practicing worthy citizenship.

Protecting the Natural Resources of the Farm

Mississippi—To impress the Future Farmers of America with the need of caring for and protecting the natural resources of their farms was the objective of the Mississippi officials in giving practical farm forestry demonstrations. More than 1,200 boys in addition to the teachers and dads witnessed demonstrations in timber stand improvement, soil conservation, planting, and timber estimation. Nearly every student and teacher in the state had the opportunity of getting some information on practical farm forestry.

Guest Speaker at State Convention

Oregon—A novel feature of the State convention of Oregon this year was the adoption of the "Guest Speaker" idea. James Eager, the State President of California, will deliver a message to the Oregon Future Farmers at one of the official meetings of the Oregon State Convention. This young farmer organization is fast adopting the improved practices of farm organization and service clubs.

State Band Organized

Missouri—The Future Farmers of Missouri recently organized a State Band. Over 700 delegates and Future Farmer members were entertained by the new organization in the three-day conference, according to Edward Kuhler, State Reporter.

Local Chapter Takes Over Swine Corporation

Illinois—In 1930 the agriculture department of Fairfield Chapter organized a swine corporation. Shares were sold and purebred Black Poland China gilts were purchased. These were farmed out to members of the class for projects. For the use of each sow the corporation received a gilt of its own choosing. Each year all old sows or any excess gilts were marketed. These sales netted dividends of 20 percent which were paid annually. According to John Taaffe, reporter, the members of the Fairfield Chapter of the F. F. A. recently voted to take over this corporation. All shares now held by graduated members will be brought in and active members will be in charge of the corporation. Any profit will be used to pay the state and national dues, the monthly dues, and for other activities of the F. F. A.

Chapter Revolving Fund

Idaho—Putting \$260 to work as a chapter revolving fund for the purchase of registered livestock, feed, and supplies is one of the duties of the Emmet Chapter officers. "We plan to enlarge the fund and establish a feed co-operative to supply part of the 200 tons of grain used by our members each year," said George Hosoda, reporter.

Do You Know:

1. That a majority of the state organizations hold their State Conventions in April and May.

2. That the Insular Convention of F. F. A. in Porto Rico had 442 members

(Continued on page 192)

	Units Performed	Units Points
Attend Church and S. S. 50 percent time 50 points		
Committee member 10 points each		
Total points for Section I		
SECTION II.—Supervised Practice Work		
Carrying projects 10 points for each		
Completed projects 20 points for each		
Exhibited project products at fair or show 25 points for each entry exhibited		
Total points for Section II		
SECTION III.—Home and Farmstead Improvement		
Repair roof 1 point per square foot repaired		
Fence repair 5 points per hour		
Set out trees 5 points per tree		
Make labor saving device 10 points each		
Total points for Section III		
SECTION IV.—Soil Fertility and Moisture Conservation		
Run Terrace lines 1 point per 100 yards		
Green manure crops turned under 25 points per acre		
Cover crops planted 25 points per acre		
Strip cropping 4 points per acre		
Total points for Section IV		
SECTION V.—Crops Improvement		
Test seed for percent germination 10 points per crop		
Plant certified or improved cotton seed 4 points		
Prune fruit trees 5 points per hour per acre		
Improve pasture 5 points per hour		
Field selection seed 5 points per hour		
Total points for Section V		
SECTION VI.—Livestock and Poultry Improvement		
Cull hens for egg production 1 point per 10 hens		
Test cow one lactation for F. B. 50 points per cow		
Hatching eggs selected 1 point per each 10 eggs		
Use purebred ram in ewe flock for first time 1 point for each 4 ewes		
Total points for Section VI		
SECTION VII.—Livestock and Poultry Feeding		
Work out feeding value of home grown feeds for each livestock enterprise on home farm 25 points		
Work out rations for each livestock enterprise on home farm 5 points per enterprise		
All above rations fed for at least 60 days 25 points per enterprise		
Total points for Section VII		
SECTION VIII.—Care and Management of Livestock and Poultry		
Care for sow at farrowing time 15 points per sow		
Control lice on hogs 3 points per hog		
Treat sheep for worms, 1 point per head		
Total points for Section VIII		
SECTION IX.—Producing Living at Home		
Butchering hogs and cut up 25 points per hog		
Butchering lambs 15 points		
Total points for Section IX		
SECTION X.—Managing Farm Business		
Keeping Farm Records		
Making farm inventory, 25 points		
Keeping expenses and receipt record, 25 points each enterprise		
Keeping production records, 25 points each enterprise		
Keeping breeding records, 10 points each enterprise		
Working out breeding program, 50 points each enterprise		
Working out crop rotation system, 15 points		
Determine scope and size of each enterprise, 5 points		
Total points for Section X		
SECTION XI.—Marketing Farm Products		
Increase quality of products marketed, 10 points each product		
Grading farm products for market, 15 points each product		
Total points for Section XI		
Grand Total		
I, _____, therefore certify that I have performed the above activities for which I have received points.		
Approved by:		
_____ (Parent)		
_____ (Instructor)		
_____ (Contest committee)		

F. F. A. Chats

in attendance.

3. Box Elder Chapter, Utah, has 160 active members, the largest reported single unit of Future Farmers of America.

4. That Texas has set a goal for 1935-36 of 389 chapters and 12,000 members.

Proposed Two-Year Course for Part-Time Classes

(Continued from page 187)

and so forth. Make application for a position. Write an advertisement offering farm products for sale.

2. Agricultural English.

Read agricultural journals and newspapers in class and have members report on articles. Have them write out these articles in their own words. Debate current events. In every case, have fellow members check grammatical mistakes in the speeches and in the written work.

3. Agricultural Situation.

Study the Agricultural Outlook, Crops and Markets, daily market reports, etc. Do not confuse students with too many tables, statistics, etc.

4. Farm Mortgages, Deeds, etc.

Have a good lawyer discuss these things before the class, pointing out the things necessary to make a mortgage binding, and the difficulties likely to be met. Determine the things necessary to make a deed binding.

Study insurance papers, bank checks, deposits, notes, drafts, shipping bills and shipping rules (these can be had from your nearest railroad) and farm contracts.

IV. Farm Law and Civics.

1. Taxation.

Have some county official (county judge, assessor, trustee, county court clerk, recorder, county superintendent) talk to the class in detail about his job. Determine how the public monies passing thru each office are spent, what part of it goes for salaries for officials and what part for improvement of the county. (Outline exactly what information is wanted, also these men are likely to "wander" considerably in their discussion.)

2. Everyday Law.

Have some good lawyer talk to the class on some of the most legal points which bother farmers, as line fences, wandering livestock, roads and right-of-way, seeds, drainage, streams, methods of renting, etc. (Again outline exactly what points the class wants discussed.)

SECOND YEAR

I. Agriculture.

Follow the same procedure used in the first year, continuing on the same enterprises, but adding some new enterprises and some new jobs.

II. Farm Mechanics.

1. Terracing.

Take the class to some member's own field, lay out and actually construct a terrace. Then, in the class, teach the fundamental principles of terrace building, the different types of terraces, the proper fall, distance between terraces, etc.

2. Repair of Harness.

(For bad days.) Have members bring in broken bridles, etc., and let the class repair them. Teach cleaning and oiling harness.

3. Wood Working and Project Equipment.

Determine farm equipment needed by members, as hog houses, feeders, chicken coops, etc. If the members will bring in the necessary materials, let the class construct these pieces of equipment. If necessary, take the class to the homes of the members to do this work.

4. Electrical Work.

If the class is in a community where power is available, teach them how to install wiring, connect switches, etc.

III. Farm Business.

1. Calculations.

Teach only practical forms of calculations. Practice calculating interest by the methods used at the community bank; go to a near-by corner and calculate the contents; determine the amounts of materials needed for a concrete structure; calculate bill of materials and cost of a barn; determine the amount of water available from a given spring, or other source, etc.

2. Land Measurement.

Measure and calculate the area of different fields.

Reference:

Mapping Fields with Traverse Board, by W. C. Pelton, Extension Division, University of Tennessee.

3. Farm Organizations.

Study the different national farm organizations, their objectives and possible advantages to the community and to the individual members of the class. Have an official of some of these organizations talk to the class and invite members to ask him questions.

IV. Health.

1. Personal Health and Hygiene.

Have the director of public health or some physician of the community talk to the boys on the most common diseases and health problems of young men, together with methods of prevention and cure.

2. Public Health.

Have director of public health talk on communicable and contagious diseases, public clinics, and community sanitation and control measures.

Organization of Agriculture Instructors

(Continued from page 181)

Green Hand initiations; working out supervised practice sheets; and many other smaller projects.

This year it was decided to enlarge our original group. We now have what is known as the Tri-County Vocational Agriculture Association. It is composed of the six instructors. Meetings are held quarterly. The officers this year are E. E. Barber, Hawkins, president; B. F. Schafer, Hayward, vice president; A. L. Jepsen, Tony, secretary and treasurer.

We still however keep our own meetings monthly in Rusk County as we find problems here that do not pertain to other teachers in the group.

We have found that in the meetings we have an exchange of ideas that go a

long ways in solving problems that arise in the teaching of vocational agriculture. We also get closer co-operation with the county agricultural agents in this way.

Our Cover

MANY states are giving some type of recognition to the out-of-school farm boy and the adult farmer who has completed work in part-time or evening classes. The cover picture shows the certificate (11 x 14 inches) presented in New Jersey. "We find these certificates helpful for part-time classes. They are given at the close of the year's work. A similar certificate is used for evening classes."

Ohio also provides for both part-time and evening class members a certificate (8 x 11 inches) for the completion of one course and in addition awards a diploma (10 x 16 inches) to each member completing four years of work. For each additional year of completed work a gold star is affixed to the diploma.

Vocational Farmers Organize

(Continued from page 187)

to discuss problems common to the members of the group. Some of the topics already requested for discussion are:

1. Handling alfalfa ground which has been winter killed.

2. Keeping farm accounts.

3. Agricultural financing.

4. Problems in water use and measurement.

5. Maintaining soil fertility.

6. Study of herd laws.

Five meetings have been held to date, with much interest shown. Invitations will be sent later to similar groups in other localities where vocational agriculture is taught to join the Rupert group and ultimately make the organization statewide.

Corrections



On page 155 of the April, 1936 issue, the above picture should have appeared to show the trailer which was described in the article on "Making Field Studies Effective" by Mr. A. H. Hausrath. Instead the following picture appeared.



This picture should have accompanied the article by Mr. Ivan Jett, Stamping Ground, Kentucky, on "Southern Tour," page 167, May issue. This was an unfortunate error under the circumstances and we are glad to make these corrections.

